REMARKS/ARGUMENTS

In the Office Action mailed October 17, 2008, claims 1-20 were rejected. In response, Applicants hereby request reconsideration of the application in view of the amendments and the below-provided remarks. No claims are added. Claims 2 and 19 are canceled.

For reference, claims 1, 3-5, 7, 8, 11-13, 15-18, and 20 are amended to change "header request" to "request header" to correct a typographical error. Claims 1, 3-5, 7, 8, 11-13, 15-18, and 20 are amended to correct issues with antecedent basis. Claim 15 is amended to recite "a server machine configured to receive the request header" and to indicate that the authentication component is to operate on the server machine. This amendment is supported by the original specification at least at the first full paragraph on page 6 of the original specification. Claim 1 is amended to recite that the request header is generated "at a client computer" and that the client authentication information is inserted into the request header "at the client computer by a client browser, without violating HTTP protocol." This amendment is supported at least by original language of claims 2 and 5, and at the first full paragraph of page 6 of the original specification. Claims 8, 12, 15, 16, and 20 contain amendments similar to the amendments described above in relation to claim 1. Claim 10 is amended to remove the limitation that the communication protocol is the HTTP protocol, which is now a limitation of the independent claim upon which the claim depends. Claim 14 contains a similar amendment to the amendment in claim 10.

Objections to the Claims

The Office Action objects to claims 1-20 for informalities. In particular, claims 1-20 are objected to for referring to a "header request." Claims 1, 3-5, 7, 8, 11-13, 15-18, and 20 are amended to change "header request" to "request header." Applicants submit that correction of this typographical error addresses the objection for referring to a "header request" and request that the objection to the claims be withdrawn.

Additionally, claim 1 was rejected for reciting inserting client authentication information into a request header "independently of the authentication process used by

said server." The Office Action suggests that this limitation "does not make sense." Applicants respectfully disagree.

Claim 1 recites "insertion of client authentication information into a request header...independently of an authentication process used by a server" and "receiving information from said server if authentication has been successful" (emphasis added). The Office Action states that these limitations purportedly indicate that "authentication is performed on the server without any additional information being sent, so it appears as though the authentication information must be used in an authentication process of the server" (emphasis added). Applicants submit that since the claim recites that information is received if authentication is successful, it is entirely reasonable that the insertion of authentication information can be independent of any authentication process in place on the server. Furthermore, Applicants submit that the assertion in the Office Action that authentication information must be used in an authentication process is incorrect. For these reasons, Applicants request that the objection to claim 1 be withdrawn.

Claim Rejections under 35 U.S.C. 101

Claims 15-19 were rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. In particular, the Office action states that claims 15-19 could be purely software.

Applicants submit that claims 15 and 16 are amended to recite statutory material, claims 17 and 18 depend on claim 16, and claim 19 is canceled. Claim 15 is amended to recite "a server machine configured to receive the request header" and to indicate that the authentication component is to operate on the server machine. This amendment is supported by the original specification at least at the first full paragraph on page 6 of the original specification. Claim 16 is amended to recite that the browser operates "on a client computer." This amendment is supported by the original specification at least at the first full paragraph on page 6 of the original specification. In light of the amendments described above, Applicants respectfully request that the rejections of claims 15-18 under 35 U.S.C. 101 be withdrawn.

Claim Rejections under 35 U.S.C. 112

Claims 1, 4, 5, 8, 11-17, 19, and 20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, these claims were rejected for antecedent basis issues. Applicants submit that claims 1, 4, 5, 8, 11-17, and 20 are amended to correct the antecedent basis issues, and claim 19 is canceled. Consequently, Applicants request that the rejection of claims 1, 4, 5, 8, 11-17, and 20 under 35 U.S.C. 112 be withdrawn.

Claim Rejections under 35 U.S.C. 103

Claims 1-5, 8, 9, 11-17, and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Maurin et al. (U.S. Pat. Pub. No. 2002/0133700, hereinafter Maurin) in view of Buch et al. (U.S. Pat. Pub. No. 2003/0217165, hereinafter Buch). Additionally, claims 6, 7, and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Maurin in view of Buch, further in view of Bishop et al. (U.S. Pat. No. 7,343,351, hereinafter Bishop). Additionally, claims 10 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Maurin in view of Buch, further in view of Rhodes (U.S. Pat. Pub. No. 2002/0049902, hereinafter Rhodes). However, Applicants respectfully submit that these claims are patentable over Maurin, Buch, Bishop, and Rhodes for the reasons provided below.

Independent Claim 1

1. The cited references do not teach all of the limitations of the claim.

Claim 1 recites "inserting client authentication information into said request header at a client computer by a client browser" (emphasis added).

In contrast, neither Maurin nor Buch teach insertion of authentication information at a client computer by a client browser. The Office Action states that paragraphs 24-26 of Maurin purportedly teach that "authentication information is automatically inserted into the request header by a browser on the client." Office Action, page 7, first full paragraph, in relation to claim 5, from which the amendment to claim 1 is drawn. Paragraphs 24-26 of Maurin, however, merely describe the standard use of cookies,

specifically that cookies are collected "by the server machine and <u>sent to the browser of the client machine</u>" (Maurin, paragraph 24, emphasis added), and "when the user reconnects to the site in question, the browser <u>sends</u> the corresponding cookie to the server machine" (Maurin, paragraph 26, emphasis added). Maurin does not teach inserting authentication information into a cookie or a request header by the browser.

Maurin merely teaches the browser receiving cookies from the server and returning the received cookie to the server. In Maurin, a certificate is added to a cookie header by an "analyzing means." Maurin, Paragraphs 49-51. The analyzing means in Maurin is a component of a security module (Maurin, paragraph 32) which is explicitly called out as "an intermediate machine" (Maurin, paragraph 30) and is <u>separate</u> from the client machine (Maurin, paragraph 17, Figure 1). In other words, Maurin teaches adding a certificate to a header <u>by a machine other than the client computer</u>.

Maurin is merely concerned with transmitting a security certificate from a security module to a server. Although Maurin describes a security certificate in a cookie header, Maurin does not teach insertion of security information into a request header by a client browser at a client computer. Rather, Maurin simply teaches a separate security module on an intermediate machine that adds a cookie containing elements of a certificate. Adding a certificate to a cookie header at an intermediate machine is different from inserting client authentication information into a request header at a client machine by a client browser. In fact, Maurin is clear that the certificate is added to the cookie header by a computer separate from, or, in the language of Maurin, "intermediate" to, the client computer. Maurin, paragraphs 17 and 30, Figure 1. Maurin does not teach inserting client authentication information into said request header at a client computer by a client browser, as recited in claim 1.

For the reasons presented above, Maurin does not teach all of the limitations of the claim because Maurin does not teach inserting client authentication information into a request header at a client computer by a client browser, as recited in the claim. Accordingly, Applicants respectfully assert claim 1 is patentable over the combination Maurin and Buch because neither Maurin nor Buch teaches all of the limitations of the claim.

2. *The proposed combination is improper.*

Additionally, claim 1 recites "Method for authenticating <u>clients</u> in a <u>client-server</u> <u>environment</u>" (emphasis added), "inserting client authentication information into said request header <u>at a client computer</u>" (emphasis added), and "sending said request header to said <u>server</u>" (emphasis added).

Even if the combination of Maurin and Buch were to teach all of the limitations of the claim, the proposed combination of Maurin and Buch is nevertheless improper. In asserting a combination of references as a basis for an obviousness rejection, the proposed combination or modification cannot change the principle of operation of the prior art. MPEP 2143.01(VI).

The proposed combination of Maurin and Buch would change the principle of operation of Buch because Buch operates using Session Initiation Protocol (SIP), which is a peer-to-peer protocol, and the proposed combination would cause Buch to operate in a client-server environment, rather than a peer-to-peer environment.

The invention of Buch operates using the SIP protocol and is focused on authentication of one peer to another peer. Buch, paragraph 1, paragraph 30 "the present invention provides a way for SIP parties to perform end-to-end user authentication." SIP is a peer-to-peer protocol used for communication between a "callee" and a "caller" in which "both are SIP clients." Buch, paragraph 2.

In contrast, claim 1 recites operation in a client-server environment and sending an extended request header to a server. Modification of Buch to operate in such an environment would change the principle of operation of Buch.

The MPEP states that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. MPEP 2143.01(VI). Therefore, since the proposed combination of Maurin and Buch would result in a change in the principle of operation of Buch—from a peer-to-peer system to a client-server system—the proposed combination of cited references is not sufficient to render the limitations of claim 1 as *prima facie* obvious. Accordingly, Applicants respectfully assert claim 1 is patentable over the combination of Maurin and

Buch because the proposed combination of Maurin and Buch is improper and, hence, insufficient to establish a *prima facie* case of obviousness.

Independent Claim 8

Applicants respectfully assert independent claim 8 is patentable over Maurin and Buch at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 8 recites "inserting authentication information into said request header <u>at a client computer by a client browser</u>" (emphasis added).

Here, although the language of claim 8 differs from the language of claim 1, and the scope of claim 8 should be interpreted independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 8. Accordingly, Applicants respectfully assert claim 8 is patentable over Maurin and Buch because neither Maurin nor Buch teach inserting authentication information into a request header at a client computer by a client browser. Additionally, modification of Buch to operate in the client server environment recited in claim 8 would change the principle of operation of Buch. Since modifying a reference in a manner that changes the principle of operation of the reference is improper, Applicants respectfully assert that the claim is patentable over the combination of Maurin and Buch.

Independent Claim 12

Applicants respectfully assert independent claim 12 is patentable over Maurin and Buch at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 12 recites "a client request header generated at a client computer, the request header containing authentication information inserted into the request header <u>by a client computer at a client browser</u>" (emphasis added).

Here, although the language of claim 12 differs from the language of claim 1, and the scope of claim 12 should be interpreted independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 12. Accordingly, Applicants respectfully assert claim 12 is patentable over Maurin and Buch because neither Maurin nor Buch teach inserting authentication information into a request header at a client computer by a client browser.

Additionally, modification of Buch to operate in the client server environment recited in claim 12 would change the principle of operation of Buch. Since modifying a reference in a manner that changes the principle of operation of the reference is improper, Applicants respectfully assert that the claim is patentable over the combination of Maurin and Buch.

Independent Claim 15

Applicants respectfully assert independent claim 15 is patentable over Maurin and Buch at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 15 recites "wherein the request header is generated by the client and the authentication information is inserted into the request header <u>at the client by a client browser</u>" (emphasis added).

Here, although the language of claim 15 differs from the language of claim 1, and the scope of claim 15 should be interpreted independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 15. Accordingly, Applicants respectfully assert claim 15 is patentable over Maurin and Buch because neither Maurin nor Buch teach inserting authentication information into a request header at a client computer by a client browser. Additionally, modification of Buch to operate in the client server environment recited in claim 15 would change the principle of operation of Buch. Since modifying a reference in a manner that changes the principle of operation of the reference is improper, Applicants respectfully assert that the claim is patentable over the combination of Maurin and Buch.

Independent Claim 16

Applicants respectfully assert independent claim 16 is patentable over Maurin and Buch at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 16 recites "a browser <u>operating on the client computer</u>, and a <u>component operating on the browser</u> for inserting client authentication information into said request header" (emphasis added).

Here, although the language of claim 16 differs from the language of claim 1, and the scope of claim 16 should be interpreted independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 16. Accordingly, Applicants respectfully assert claim 16 is patentable over Maurin and Buch because neither Maurin nor Buch teach inserting authentication information into a request header at a client computer by a client browser. Additionally, modification of Buch to operate in the client server environment recited in claim 16 would change the principle of operation of Buch. Since modifying a reference in a manner that changes the principle of operation of the reference is improper, Applicants respectfully assert that the claim is patentable over the combination of Maurin and Buch.

Independent Claim 20

Applicants respectfully assert independent claim 20 is patentable over Maurin and Buch at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 20 recites "inserting client authentication information into said request header <u>at a client computer by a client browser</u>" (emphasis added).

Here, although the language of claim 20 differs from the language of claim 1, and the scope of claim 20 should be interpreted independently of claim 1, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 20. Accordingly, Applicants respectfully assert claim 20 is patentable over Maurin and Buch because neither Maurin nor Buch teach inserting authentication information into a request header at a client computer by a client browser. Additionally, modification of Buch to operate in the client server environment recited in claim 20 would change the principle of operation of Buch. Since modifying a reference in a manner that changes the principle of operation of the reference is improper, Applicants respectfully assert that the claim is patentable over the combination of Maurin and Buch.

Dependent Claims

Claims 3-7, 9-11, 13, 14, 17, and 18 depend from and incorporate all of the limitations of the corresponding independent claims 1, 8, 12, and 16. Applicants respectfully assert claims 3-7, 9-11, 13, 14, 17, and 18 are allowable based on allowable base claims. Additionally, each of claims 3-7, 9-11, 13, 14, 17, and 18 may be allowable for further reasons.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited.

This response is accompanied by the appropriate fee to obtain a 1-month extension of the period for responding to the Office Action, thereby moving the deadline for response from January 17, 2009, to February 17, 2009.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **09-0461** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **09-0461** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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